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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/446,641	12/22/1999	TSUYONOBU HATAZAWA	P99.2641	2680

26263 7590 06/10/2003

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EXAMINER

DOVE, TRACY MAE

ART UNIT	PAPER NUMBER
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1745

20

DATE MAILED: 06/10/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Advisory Action

Application No.

09/446,641

Applicant(s)

HATAZAWA ET AL.

Examiner

Tracy Dove

Art Unit

1745

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

THE REPLY FILED 28 May 2003 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

PERIOD FOR REPLY [check either a) or b)]

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.  
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on \_\_\_\_\_. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.  
2. ☒ The proposed amendment(s) will not be entered because:  
(a) ☒ they raise new issues that would require further consideration and/or search (see NOTE below);  
(b) ☐ they raise the issue of new matter (see Note below);  
(c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
(d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: the electrolyte concentration is a new limitation.

3. ☒ Applicant's reply has overcome the following rejection(s): all 35 U.S.C. 112 rejections.  
4. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).  
5. ☐ The a) ☐ affidavit, b) ☐ exhibit, or c) ☐ request for reconsideration has been considered but does NOT place the application in condition for allowance because: \_\_\_\_\_.  
6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.  
7. ☒ For purposes of Appeal, the proposed amendment(s) a) ☒ will not be entered or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: \_\_\_\_\_.

Claim(s) objected to: \_\_\_\_\_.

Claim(s) rejected: 10 and 13-17.

Claim(s) withdrawn from consideration: \_\_\_\_\_.

8. ☐ The proposed drawing correction filed on \_\_\_\_\_ is a) ☐ approved or b) ☐ disapproved by the Examiner.  
9. ☐ Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_.  
10. ☒ Other: See attached sheet.

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Attachment to Advisory Action (Paper #20):

The added limitation “the matrix polymer is mixed with a mixture of (i) an electrolyte salt, (ii) a solvent, and (iii) a plasticizer” requires further consideration because it is unclear how “plasticizer” and “solvent” are defined. See page 17, lines 1-9 of the specification which states, “The negative and positive electrodes were applied uniformly with a solution in which 30 parts by weight of a plasticizer composed of 42.5 parts by weight of ethylene carbonate (EC), 42.5 parts by weight of propylene carbonate (PC) and 15 parts by weight of  $\text{LiPF}_6$ , 10 parts by weight of polyvinyl fluoride being a matrix polymer of 600,000 in weight-average molecular weight and 60 parts by weight of diethyl carbonate were mixed and dissolved.” Thus, the electrolyte has 30 wt% plasticizer, 10 wt% matrix polymer and 60 wt% diethyl carbonate. Ethylene carbonate, propylene carbonate and diethyl carbonate are all solvents. See also page 8, first paragraph and page 11, last three lines.

Furthermore, “the concentration of the electrolyte salt is 0.5 to 2.0 mols/liter in the plasticizer” requires further consideration because it is unclear what “plasticizer” encompasses.


Gao appears to anticipate the proposed amended claim 10. Gao teaches the electrolyte typically comprises from about 5 to about 25 weight percent of the inorganic ion salt. The percentage of the salt depends on the type of salt and electrolytic solvent employed (col. 5, lines 36-41). Typical examples of solvent include mixtures of such materials as propylene carbonate and ethylene carbonate, which are commercially available (col. 5, lines 51-58 and col. 6, lines 16-18). Gao teaches the electrolyte comprises 5-25 wt % of inorganic ion salt, 0-80 wt% electrolyte solvent (organic carbonate) and 5-30 wt% of the matrix polymer (col. 8, lines 7-20).

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Regarding Applicant arguments, evidence of unexpected results has not been provided relating to the concentration of salt in the plasticizer.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tracy Dove whose telephone number is (703) 308-8821. The Examiner may normally be reached Monday-Thursday (9:00 AM-7:30 PM). My supervisor is Pat Ryan, who can be reached at (703) 308-2383. The Art Unit receptionist can be reached at (703) 308-0661 and the official fax numbers are 703-872-9310 (after non-final) and 703-872-9311 (after final).

June 9, 2003

  
STEPHEN K. LAFUT  
EXAMINER  
GROUP 1700